DOCUMENT RESUME

ED 335 369 TM 016 967

AUTHOR Johnson, William L.; And Others
TITLE A Factorial and Rasch Analysis of the Charles F. Kettering Ltd. School Climate Profile.
PUB DATE Apr 91
NOTE 25p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, April 3-7, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attitude Measures; Construct Validity; *Educational Environment; *Factor Analysis; *Item Response Theory; Profiles; Psychometrics; *Rating Scales; Secondary Education; Secondary School Students; Secondary School Teachers; Student Attitudes; Teacher Attitudes; Test Reliability; *Test Validity
IDENTIFIERS *Charles F Kettering Ltd School Climate Profile; *Rasch Model

ABSTRACT

A popular instrument purported to measure psychological dimensions of school climate--the Charles F. Kettering Ltd. School Climate Profile (CFK)--was analyzed psychometrically. Factor analysis was used to examine the construct validity of the CFK scale, Part A, General Climate Factors, which contains 8 subscales each with 5 items (a total of 40 items). A second-order factor analysis was performed on the matrix of correlations and two second-order factors were extracted. A Rasch latent trait analysis was used to determine the extent to which the items identified as loading on the same factor represented a well-defined and interpretable latent variable. Three samples were used: (1) 405 senior high school students; (2) 490 junior high and senior high school students; and (3) 906 teachers, administrators, and junior high and senior high school students. Results of analyses indicate that, in a school climate scale, affective and experiential features of the setting (such as respect, high morale, caring, and trust) should be distinguished from cognitive and managerial components (such as opportunity for input, continuous academic and social growth, cohesiveness, and school renewal). Results of factor analysis suggest that the CFK may be an unstable instrument for measuring a school climate. It may not be possible to develop a single scale appropriate for all members of a school setting; however, it may be possible to develop a scale measuring student perceptions of school climate. Four tables and two figures provide study data. An appendix contains the CFK instrument. A 13-item list of references is included. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED335869

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

WILLIAM L. JOHNSON

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Factorial and Rasch Analysis of the Charles F. Kettering Ltd. School Climate Profile

William L. Johnson
Ambassador College

Joseph M. Ryan
Paul N. Dixon
University of South Carolina

Paper presented at the annual meeting of the American Educational Research Association, Chicago, Il., April, 1991

TM016967

BEST COPY AVAILABLE

A Factorial and Rasch Analysis of the *Charles F. Kettering Climate Scale*

The concept of school climate has been of interest to educational researchers and practitioners since the late 1960's. More recently, research on school effectiveness has generated renewed emphasis on the importance of a physical, intellectual, and psychological environment in which optimal teaching and learning occurs (Good & Brophy, 1986). School climate research is characterized by the complexity of defining and measuring "climate." The purpose of this paper is to psychometrically analyze a popular climate instrument purported to measure the psychological dimension of school climate *The Charles F. Kettering Ltd. School Climate Profile* (CFK Ltd., 1973). The instrument, designed for administration to all constituents of the school--students, teachers, parents, staff, and administrators, is widely used to gather data for administrative planning and curriculum revision. While the general psychometric literature suggests that at least two types of validity measures be used in scale development, the CFK developers indicate that they used only face validity in the instrument construction.

The CFK is analyzed using two different psychometric approaches. First, a factor analytic approach is employed to examine the construct validity of the CFK scale, Part A, General Climate Factors. A second-order factor analysis is performed on the matrix of correlations and two second-order factors are extracted (Johnson and Dixon, 1990). Second, a Rasch latent trait analysis is employed to determine the extent to which the items identified as loading on the same factors seem to represent a well defined and interpretable latent variable. Results based on the Rasch model for rating scales are

presented in detail and data are also examined using the partial credit model (Andrich, 1978, 1982; Masters, 1982; Wright and Masters, 1982; Masters and Wright, 1984).

Procedures

Instrument

The CFK School Climate Profile, Part A, The general Climate Factors section, consists of eight subscales each with five items for a total of 40 items. The subscales, the abbreviations used for them in various tables, and the position of the items on the instrument, are: (1) Respect, (RES), items 1-5; (2) Trust, (TRU), items 6-10; (3) High Morale, (HIM), items 11-15; (4) Opportunity for Input, (OPP), items 16-20; (5) Continuous Academic and Social Growth, (CON), items 21-25; (6) Cohesiveness, (COH), items 26-30; (7) School Renewal, (REN), items 31-35; (8) Caring, (CAR), items 36-40. A copy of the instrument is contained in Appendix A.

For each item, respondents use one of four descriptors: 1 = almost never; 2 = occasionally; 3 = frequently; 4 = almost always. Each item is answered using two different columns , one for a "What is" and another for a "What should be" frame of reference or context. The general scale technique involves calculating the differences between each subject's pairs of responses. Only the responses to " What is" column are examined in this study.

Samples

Three samples are used in this study. The first sample consists of 405 senior high school students. The second sample consist of 490 junior and senior high school students. The third sample contains 906 teachers, administrators, and junior and senior

high school students. The factors examined in the Rasch analyses are based on second-order factors identified by factor analyses of the third sample.

Results

Factor Analysis

Primary and second-order factor analyses were used to examine the construct validity of the General Climate Factors section of the Kettering instrument (Johnson, and Dixon, 1990). In the first-order principal components analyses, all principle components with eigenvalues greater than one were extracted and rotated obliquely using promax rotation.

In the second-order factor analysis, the interfactor correlation matrices from the principal components analysis were factored. Two second-order factors were extracted from the interfactor correlation matrices and rotated to the varimax criterion (Johnson and Dixon, 1990). Although second order factors are often interpreted, Gorsuch (1983) argued that this is not desirable. Therefore, the first-order factors were postmultiplied by the second-order factors and the product matrices then were rotated to the varimax criterion

Although similar factor loadings across this large sample spectrum had been anticipated, the results show little similar resemblance of factor structures from sample to sample. Factor analyses based on several other samples result in different item clusterings (Johnson and Dixon, 1990). The primary and second-order factor analyses suggest that the CFK General Climate subscales group in a different manner than was intended by the scale's developers (Fox, Boies, Brainard, Fletcher, Huge, Martin,

Monasmith, Olivero, Schmuck, Shaheen, and Stegmanet, 1973).

This strongly suggests a basic instability of the CFK since only a slight to moderate change in the sample grouping created major changes in column factors. The analysis suggests that the variability of the factor structures may make the CFK an unstable instrument for measuring school climate. The factor structure of a measure is considered to have been proved invariant only when a similar structure has been identified in a variety of studies (Neale and Liebert, 1986; Thompson, 1989).

The results of the factor analyses from the various samples raise questions about the current subscale structure and suggest the need for additional analyses. In the current study, Factor one for the third sample (N=906) is comprised of items 3, 8, 10, 12-15, 19, 20, 22, 24, 25, 26, 28-40. Factor two for sample three is comprised of items 1, 2, 6, 7, 9, 16.

Rasch Analysis

The Rasch analyses were performed for each of the three samples to examine the structure of the scale as defined within each sample, the tests of item fit for each sample, and the stability of item parameter estimates across samples. The item clusters analyzed were those previous described as Factor 1, with 26 items, and Factor 2, with 6 items, based on sample 3. The scale and credit procedures were conducted using the Credit program of Masters, Wright, and Ludlow (1981). The results of the scale analysis are described in detail. The partial credit analysis provided very similar information and lead to the same inferences in virtually all cases.

Factor 1

A content analysis of Factor 1 items does not suggest a well-defined, easily interpreted variable. There are items from each of the CFK's original eight subscales on Factor 1. The scale analyses reported in Tables 1A, 1B and 1C, reveal a total of nine misfitting items across the three samples, using a criterion of +3.0 for determining misfit. Two items on one sample each; four items misfit on two of the samples; and three

---

Tables 1A, 1B and 1C about here

---

items misfit across all three samples. The misfitting items are shown in Table 2 for each sample. All the misfitting items come from the Respect, High Morale, Caring, and Trust subscales, although not all of the items from these subscales misfit. No items from Opportunity for Input, Continuous Academic and Social Growth, Cohesiveness, and School Renewal misfit.

Table 2 about here

It is useful to note that only four items misfit on the homogeneous sample of 405 high school seniors; seven items misfit on the more heterogeneous sample of 490 junior and senior high school students; and eight items misfit on the 906 subjects that include students, teachers and school administrators. The following are the three items that misfit across all three samples:

Respect 3: Parents are considered by this school as important collaborators.

Caring 1: There is someone in this school I can always count on.

Trust 3: Our principal is a good spokesman before the superintendent and the board for our interest and needs.

Deleting the Factor 1 misfitting items resulted in another subset of misfitting items. This subset also varied across samples and included items from different subscales.

The partial-credit analysis provides very similar results in terms of item misfit and obscurity in the meaning of the empirically derived factor 1.

Factor 2.

The results of the scale analyses for Factor 2 across the three samples are shown in Table 3. The items show a relatively high degree of fit to the model in both

---

Table 3 about here

---

the scale and credit analyses for all three samples. The stability of the item scale values were examined by calculating a standardized differences for each item for estimates from each pair of samples. Differences in scale values from two samples were divided by the pooled standard error of the estimates for the six items for the three pairs of samples. The standardized difference for Trust 1 was -2.7 for scale values based on the Sample 1 (n=405) and Sample 2 (n=490). All other standardized differences were less than $\pm$ 2.

Critical Attributes of Factor 2. The six items of Factor 2, arranged by scale value order for Sample 3 (n=906), are shown in Figure 2. The ends of this

---

Figure 2 about here

---

scale are defined by Respect 2 (0.86) and Trust 1 (+0.55). Both of these deal with student-teacher relationships. It is relatively easy to endorse the statement that teachers treat students like persons; on the other end of the scale, it is relatively difficult to assert that teachers are on the side taken by students. The poles of this scale make a certain degree of sense. The most basic expectation students might have for a school climate is that teachers would "treat students like persons" whereas a much stronger statement about a school's climate would include teachers siding with students.

The items that define Factor 2 appear to have three critical attributes. These attributes are 1) they involve students and how students perceive themselves in their relationships with teachers or the school in general; 2) they deal with affective issues such as feelings, sharing, fairness, or respect; and 3) they deal with student issues with which students would be familiar and issues on which students' feelings might be known by teachers and administrators. This scale seems to range from basic respect, to fair and open-minded treatment, to teachers' advocacy of students' positions.

The validity of this interpretation was studied using what might be described as a "divergent validation" procedure. First, several items were identified that reflect some but not all of the critical attributes of the variable. Next, each item was combined with the six Factor 2 items to form seven-item scales. The seven-item scales were calibrated to observe the fit of the target items. The following three items were examined using this

procedure:

Item Code	Item Content
Respect 4:	Teachers from one subject area or grade level respect those from other subject areas.
Caring 2:	The principal really cares about students.
Continuous Academic and Social Growth 3:	Students feel that the school program is meaningful and relevant to their present and future needs.

Respect 4 reflects an affective issue (attribute 2) but not in the context of a teacher-student relationship (attribute 1). Students may not be familiar with the teacher-teacher aspect of the school's climate. Caring 2 deals with an affective issues (attribute 2), involves students (attribute 1), but deals with the principal-student relationship. Students familiar enough with the principal to know how she/he feels about students have often encountered the principal in a particularly positive or negative context. Lastly, Continuous Academic and Social Growth 3 reflects the students' perspective (attribute 3) but does not deal with an affective-experiential issue (attribute 2).

Three seven-item scales were examined, including the six factor 2 items and then one of the three items just described. The fit for Respect 4, Caring 2, and Continuous Growth 3 were respectively, 5.6, 14.73, and 8.73. These large fit statistics indicate that while the three items may seem to reflect some of the critical characteristics of Factor 2 they do not belong on the scale because each is missing one or more of the critical

features that define the variable.

There were no items that seemed to reflect all the critical features of Factor 2 and thus a convergent validity calibration and test of fit could not be performed.

Discussion

The factor analytic and latent trait analyses of the CFK scale leads to several inferences about the measurement of school climate that may be helpful in developing a useful instrument to measure this important construct. First, based on the analysis of the first factor, a school climate scale needs to separate affective-experiential features of the setting, such as Respect, High Morale, Caring and Trust on the CFK scale, from the cognitive/managerial components, such as Opportunity for Input, Continuous Academic and Social Growth, Cohesiveness, and School Renewal. Second, it may not be possible to develop a single scale or set of scales appropriate for all members of a school setting. The meaning and experience of the school's climate may be sufficiently different for students, teachers and administrators that items would not have the same meaning for these different groups. It seems especially likely that while teachers and administrators may have insights into the students' beliefs and feelings about school climate, students would be unfamiliar with many dynamics a that influence teachers' and administrators' views of school climate. Indeed, the meaning and hence the measurement of school climate may be different for elementary, junior high, and senior high school students. These inferences are suggested by the analysis of misfit for Factor 1 which showed that the heterogeneous sample of 906 junior and senior high school students, combined with teachers and administrators, had more misfitting items than the

junior and senior high school students sample (490), and that the relatively more homogeneous sample of 405 senior high school students revealed the fewest misfitting items. Students at various levels, teachers, and administrators may not constitute a "unidimensional" population in reference to critical attributes of school climate hence care must be taken in suggesting that one instrument can be used across these different groups.

The analysis of Factor 2 suggests a useful student-related scale that measures students' perceptions and feelings of how they are treated and dealt with by teachers and by the school in general. The scale ranges from basic respect of students, to fair and open-minded interactions, to advocacy on behalf of students. Students would have direct experience related to this scale and teachers and administrators could also respond knowledgeably to such items. This "Respect-Advocacy for Students (RAS)" scale describes an important characteristic of a school's climate from the perspective of students' life in the school. It would be useful to expand the scale suggested in the analyses described in this paper and to explore applications of such a scale in school settings. A careful analysis of the types of students and schools that are relatively high, relatively low, or which misfit when measured by this scale would provide additional insight into the nature of school climate.

References

Andrich, (1978). A rating formulation for ordered response categories. *Psychometrika, 43*, 561-573.

Andrich, (1982). A model for contingency tables having an ordered response classification. *Biometrics*, 35, 403-415.

Fox, R.S., Boies, H.E., Brainard, E., Fletcher, E., Huge, J.S., Martin, C.L., Maynard, W., Monasmith, J., Olivero, J. Schmuck, R. Shaheen, T.A., and Stegeman, W.H. (1973) *School climate improvement: A challenge to the school administrator*. Bloomington, In.: Phi Delta Kappa Educational Corporation.

Good, T.L., and Brophy, J.E. (1986). School effects. In M.C. Wittrock (Ed.) *Handbook of Research on Teaching*. 3rd Ed. N.Y.: MacMillan Co., 570-602.

Gorsuch, R.L. (1983). *Factor Analysis* (2nd Ed.). Hillsdale, N.J.: Erlbaum.

Johnson, W.L., and Dixon, P.N. (1990). A statistical analysis of the Charles F. Kettering Climate Scale. Paper presented at the Annual Meeting of the American Educational Research Association, 1990, Boston, Mass.

Masters, G.N. (1982). A Rasch model for partial credit scoring. *Psychometrika, 47*, 149-174.

Masters, G.N. and Wright, B.D. (1984). The essential process in a family of measurement models. *Psychometrika, 49*, 529-544.

Masters, G.W., Wright B.D., and Ludlow, L.H. (1981). Credit: A Rasch Program for ordered categories. Chicago: University of Chicago, Department of Education.

Neale, J.M., and Liebert, R.M. (1986). *Science and Behavior: An introduction to methods of research* (3rd ed.). Englewood Cliffs, N.J: Prentice-Hall.

Thompson, B. (1989). Meta-analysis of factor structure studies: A case study example with BEM's androgyny measure. *The Journal of Experimental Education, 57*(2), 187-197.

Wright, B.D. and Masters, G.N. (1982). *Rating scale analysis.* Chicago: MESA Press.

TABLE 1A
SAMPLE 405 FACTOR 1 SCALE ITEM STATISTICS FOR N = 405

SEQ NUMBER	NAME	ITEM VALUE	ITEM ERROR	SFIT
5	HIM3	0.86	0.05	1.65
8	OPP4	0.44	0.05	-2.19
12	CON5	0.35	0.05	-1.16
18	REN2	0.30	0.05	-3.09
3	TRU5	0.25	0.05	1.38
15	COH4	0.23	0.05	-2.78
25	CAR4	0.21	0.05	-3.05
24	CAR3	0.19	0.05	-0.20
10	CON2	0.19	0.05	-3.46
19	REN3	0.18	0.05	0.00
14	COH3	0.16	0.05	-1.08
9	OPP5	0.15	0.05	-3.00
20	REN4	0.15	0.05	-1.77
1	RES3	0.01	0.05	3.25
17	REN1	-0.03	0.05	-1.54
4	HIM2	-0.19	0.06	-1.24
26	CAR4	-0.19	0.06	0.20
11	CPN4	-0.25	0.06	0.00
21	REN5	-0.26	0.06	-1.02
16	COH5	-0.28	0.06	-0.97
7	HIM5	-0.28	0.06	5.04
6	HIM4	-0.29	0.06	1.62
22	CAR1	-0.30	0.06	3.14
23	CAR2	-0.34	0.06	2.62
13	COH1	-0.56	0.06	2.62
2	TRU3	-0.71	0.06	4.13

TABLE 1B
SAMPLE 490 FACTOR 1 SCALE ITEM STATISTICS **FOR N = 490**

SEQ NUMBER	NAME	ITEM VALUE	ITEM ERROR	SFIT
5	HIM3	0.78	0.05	3.10
8	OPP4	0.44	0.05	-1.60
15	COH4	0.32	0.05	-4.64
20	REN4	0.28	0.05	-2.34
14	COH3	0.24	0.05	-5.73
3	TRU5	0.23	0.05	3.35
18	REN2	0.17	0.05	-2.90
12	CON5	0.16	0.05	1.05
17	REN1	0.16	0.05	-3.41
19	REN3	0.11	0.05	-2.17
25	CAR4	0.10	0.05	-1.83
9	OPP5	0.08	0.05	-1.47
10	CON2	0.07	0.05	-3.75
24	CAR3	0.04	0.05	-2.55
21	REN5	-0.02	0.05	-3.31
4	HIM2	-0.03	0.05	0.00
11	CON4	-0.14	0.05	-0.22
1	RES3	-0.17	0.05	6.91
16	COH5	-0.24	0.05	-1.13
6	HIM4	-0.25	0.05	2.81
26	CAR5	-0.25	0.05	1.24
7	HIM5	-0.36	0.05	3.49
22	CAR1	-0.39	0.05	3.04
13	COH1	-0.40	0.06	0.73
23	CAR2	-0.47	0.06	4.32
2	TRU3	-0.48	0.06	4.48

TABLE 1C
SAMPLE 906 FACTOR 1 SCALE ITEM STATISTICS **FOR N = 906**

SEQ NUMBER	NAME	ITEM VALUE	ITEM ERROR	SFIT
5	HIM3	0.77	0.03	3.52
8	OPP4	0.43	0.03	-3.68
15	COH4	0.28	0.04	-6.07
20	REN4	0.26	0.04	-2.69
18	REN2	0.24	0.04	-4.20
12	CON5	0.22	0.04	.29
3	TRU5	0.21	0.04	3.74
14	COH3	0.21	0.04	-5.66
25	CAR4	0.17	0.04	-3.81
10	CON2	0.13	0.04	-5.11
19	REN3	0.13	0.04	-1.68
24	CAR3	0.09	0.04	-2.14
9	OPP5	0.08	0.04	-3.70
17	REN1	0.06	0.04	-2.99
21	REN5	-0.06	0.04	-2.09
4	HIM2	-0.08	0.04	-0.75
1	RES3	-0.09	0.04	8.69
11	CON4	-0.18	0.04	0.35
26	CAR5	-0.22	0.04	1.31
16	COH5	-0.25	0.04	-1.48
6	HIM4	-0.26	0.04	3.32
22	CAR1	-0.33	0.04	4.32
7	HIM5	-0.34	0.04	7.10
23	CAR2	-0.40	0.04	4.95
13	COH1	-0.43	0.04	1.59
2	TRU3	-0.62	0.40	6.62

TABLE 2

SAMPLE 405 FACTOR 2
SCALE ITEM STATISTICS
N = 405

SEQ NUMBER	NAME	ITEM VALUE	ITEM ERROR	SFIT
3	TRU1	0.44	0.06	-3.44
6	OPP1	0.44	0.06	1.33
5	TRU4	0.07	0.06	-2.75
4	TRU2	0.05	0.06	1.15
1	RES1	-0.19	0.06	0.63

SAMPLE 490 FACTOR 2
SCALE ITEM STATISTICS
N = 490

SEQ NUMBER	NAME	ITEM VALUE	ITEM ERROR	SFIT
3	TRU1	0.67	0.06	-3.50
6	OPP1	0.48	0.06	1.29
4	TRU2	0.05	0.06	1.87
5	TRU4	-0.10	0.06	-2.93
1	RES1	-0.15	0.06	0.66
2	RES2	-0.94	0.07	0.60

SAMPLE 906 FACTOR 2
SCALE ITEM STATISTICS
N = 906

SEQ NUMBER	NAME	ITEM VALUE	ITEM ERROR	SFIT
3	TRU1	0.55	0.04	-4.98
6	OPP1	0.43	0.04	2.66
4	TRU2	0.03	0.04	1.59
5	TRU4	0.01	0.04	-3.86
1	RES1	-0.16	0.04	-0.16
2	RES2	-0.86	0.05	0.67
2	RES2	-0.81	0.07	1.63

Sample		
Senior High School n = 405	Junior and Senior High School n = 490	Junior, Senior High, Teachers, Administrators n = 906
Respect 3	Respect 3	Respect 3
High Morale 5		High Morale 5
Caring 1	Caring 1	Caring 1
Trust 3	Trust 3	Trust 3
	High Morale 3	High Morale 3
	Trust 5	Trust 5
	High Moral 7	
	Caring 2	Caring 2
		High Morale 4

Figure 1. Items misfitting, by sample.

Scale Value	Item Code	Item Content
+0.55	Trust 1:	Students feel that teachers are "on their side."
+0.43	Opportunity for Input 1:	I feel that my ideas are listened to and used in this school.
+0.03	Trust 2:	While we don't always agree, we can share our ides with each other openly.
+0.01	Trust 4:	Students can count on teachers to listen to their side of the story and to be fair.
-0.16	Respect 1:	In this school, even low achieving students are respected.
-0.86	Respect 2:	Teachers treat students as persons.

Figure 2. Scale values, item codes and content, Factor 2.

Appendix A

RESPECT:

1. In this school even low achieving students are respected.
2. Teachers treat students as persons.
3. Parents are considered by this school as important collaborators.
4. Teachers from one subject area or grade level respect those from other subject areas.
5. Teachers in this school are proud to be teachers.

TRUST:

6. Students feel that teachers are "on their side."
7. While we don't always agree, we can share our concerns with each other openly.
8. Our principal is a good spokesman before the superintendent and the board for our interests and needs.
9. Students can count on teachers to listen to their side of the story and to be fair.
10. Teachers trust students to use good judgment.

HIGH MORALE

11. This school makes students enthusiastic about learning.
12. Teachers feel pride in this school and in its students.

13. Attendance is good; students stay away only for urgent and good reasons.
14. Parents, teachers, and students would rise to the defense of this school's program if it were challenged.
15. I like working in this school.

OPPORTUNITY FOR INPUT

16. I feel that my ideas are listened to and used in this school.
17. When important decisions are made about the programs in this school, I, personally, have heard about the plan beforehand and have been involved in some of the discussions.
18. Important decisions are made in this school by a governing council with representation from students, faculty, and administration.
19. While I obviously can't have a vote on every decision that is made in this school that affects me, I do feel that I can have some important input into that decision.
20. When all is said and done, I feel that I count in this school.

CONTINUOUS ACADEMIC AND SOCIAL GROWTH:

21. The teachers are "alive;" they are interested in life around them; they are doing interesting things outside of school.
22. Teachers in this school are "out in front," seeking better ways of teaching and learning.
23. Students feel that the school program is meaningful and relevant to their present and future needs.
24. The principal is growing and learning, too. He or she is seeking new ideas.
25. The school supports parent growth. Regular opportunities are provided for parents to be involved in learning activities and in examining new ideas.

COHESIVENESS:

26. Students would rather attend this school than transfer to another.
27. There is a "we" spirit in this school.
28. Administration and teachers collaborate toward making the school run effectively, there is little administrator-teacher tension.
29. Differences between individuals and groups (both among faculty and students) are considered to contribute to the richness of the school; not as divisive influences.

30. New students and faculty members are made to feel welcome and part of the group.

SCHOOL RENEWAL:

31. When a problem comes up, this school has procedures for working on it; problems are seen as normal challenges, not as "rocking the boat."
32. Teachers are encouraged to innovate in their classroom rather than to conform.
33. When a student comes along who has special problems, this school works out a plan that helps that student.
34. Students are encouraged to be creative rather than to conform.
35. Careful effort is made, when new programs are introduced, to adapt them to the particular needs of this community and this school.

CARING:

36. There is someone in this school that I can always count on.
37. The principal really cares about students.
38. I think people in this school care about me as a person; are concerned about more than just how well I perform my role at school (as student, teacher, parent, etc.).

39. School is a nice place to be because I feel wanted and needed there.

40. Most people at this school are kind.